We claim:

1. A screed assembly for a paving vehicle for forming a mat of paving material upon a base surface, the screed assembly comprising:

a frame connectable with the vehicle;

a first screed plate movably connected with the frame so as to be rotatably displaceable about a first axis;

a second screed plate movably connected with the first screed plate so as to be rotatably displaceable about a second axis extending generally perpendicular to the first axis; and

a connective member having a first end connected with the frame and a second end linearly displaceable with respect to the first end and pivotably connected with the second screed plate such that when the first screed plate rotatably displaces about the first axis, the second screed plate pivotably displaces with respect to the connective member while a distance between the first and second ends of the connective member remains substantially constant.

2. The screed assembly as recited in claim 1 wherein the first screed plate has a first working surface, the second screed plate has a second working surface, and the second screed plate is rotatably displaceable about a third axis extending through the second end of the connective member, the third axis being substantially collinear with the first axis when the first and second screed working surfaces are generally disposed within a common plane.

3. The screed assembly as recited in claim 2 wherein the first axis and the third axis each extend substantially perpendicular to the second axis and one of are each spaced a substantially

equal distance in a perpendicular direction with respect to the second axis and each intersect the second axis.

4. The screed assembly as recited in claim 1 wherein the paving vehicle has a generally horizontal, longitudinal centerline, the first axis is generally horizontal and extends generally perpendicular to the vehicle centerline when the frame is connected with the vehicle, and the second axis is generally horizontal and extends generally parallel to the vehicle centerline.

5. The screed assembly as recited in claim 1 wherein linear displacement of the connective member second end with respect the connective member first end causes the second screed plate to rotatably displace about the second axis.

6. The screed assembly as recited in claim 1 wherein rotational displacement of the second screed plate about the second axis adjusts an acute vertical angle between the second screed plate and the first screed plate.

7. The screed assembly as recited in claim 6 wherein when the frame is connected with the paving vehicle and the first and second screed plates are arranged such that the acute vertical angle between the two plates has a value greater than zero degrees, the screed assembly forms the material mat with an angled section having an upper surface disposed at a vertical angle with respect to an upper surface of a remaining section of the material mat.

8. The screed assembly as recited in claim 1 wherein when the frame is connected with the paving vehicle, rotational

displacement of the first screed plate about the first axis adjusts an acute vertical angle between the first screed plate and the base surface so as to adjust a thickness of the material mat formed by the paving vehicle.

9. The screed assembly as recited in claim 1 wherein the connective member is a hydraulic cylinder.

10. The screed assembly as recited in claim 1 further comprising a self-aligning pivot device including a first portion attached to the second screed plate and a second portion attached to the connective member second end and movably attached to the first portion such that each pivot portion is rotatably displaceable with respect to the other portion at least partially about a third axis and at least partially about fourth axis extending generally perpendicular to the third axis.

11. The screed assembly as recited in claim 10 wherein when the first screed plate rotatably displaces about the first axis, the first pivot portion rotatably displaces with respect to the second pivot portion about the third axis so that the connective member second end remains substantially stationary with respect to the connective member first end.

12. A screed assembly for a paving vehicle for forming a mat of paving material upon a generally horizontal base surface, the vehicle having a generally horizontal, longitudinal centerline and the material mat having a generally horizontal upper surface, the screed assembly comprising:

a frame connectable with the vehicle;

a first screed plate having a first working surface and being movably connected with the frame so as to be rotatably

displaceable about a first, generally horizontal axis extending generally perpendicular to the vehicle centerline;

a second screed plate having a second working surface and being movably connected with the first screed plate so as to be rotatably displaceable about a second, generally horizontal axis extending generally perpendicular to the first axis; and

a connective member having a first end connected with the frame and a second end pivotably connected with the second screed plate, the connective member second end being located on the first axis when the first and second working surfaces are each generally disposed within a common plane such that when the first plate rotatably displaces about the first axis, the second screed plate pivotably displaces about the connective member second end while the connective member second end remains substantially stationary with respect to the connective member first end.

13. The screed assembly as recited in claim 12 wherein the second screed plate is rotatably displaceable about a third axis extending through the second end of the connective member, the third axis being substantially collinear with the first axis when the first and second screed working surfaces are generally disposed within a common plane.

14. The screed assembly as recited in claim 12 wherein linear displacement of the connective member second end with respect the connective member first end causes the second screed plate to rotatably displace about the second axis.

15. The screed assembly as recited in claim 12 wherein rotational displacement of the second screed plate about the

second axis adjusts an acute vertical angle between the second screed plate and the first screed plate.

16. The screed assembly as recited in claim 15 wherein when the frame is connected with the paving vehicle and the first and second screed plates are arranged such that the acute vertical angle between the two plates has a value greater than zero degrees, the screed assembly forms the material mat with an angled section having an upper surface disposed at a vertical angle with respect to an upper surface of a remaining section of the material mat.

17. The screed assembly as recited in claim 12 wherein when the frame is connected with the paving vehicle, rotational displacement of the first screed plate about the first axis adjusts an acute vertical angle between the first screed plate and the base surface so as to adjust a thickness of the material mat formed by the paving vehicle.

18. The screed assembly as recited in claim 12 wherein the connective member is a hydraulic cylinder.

19. The screed assembly as recited in claim 12 further comprising a self-aligning pivot device including a first portion attached to the second screed plate and a second portion attached to the connective member second end and movably attached to the first portion such that each pivot portion is rotatably displaceable with respect to the other portion at least partially about a third axis and at least partially about fourth axis extending generally perpendicular to the third axis.

20. A paving vehicle for forming a mat of paving material upon a generally horizontal base surface, the paver comprising:

a chassis having a generally horizontal, longitudinal centerline;

a screed frame connected with the vehicle;

a first screed plate movably connected with the frame so as to be rotatably displaceable about a first, generally horizontal axis extending generally perpendicular to the vehicle centerline;

a second screed plate movably connected with the first screed plate so as to be rotatably displaceable about a second, generally horizontal axis extending generally perpendicular to the first axis; and

a connective member having a first end connected with the frame, a second end pivotably connected with the second screed plate and a centerline extending between the first and second ends, the connective member centerline and the first axis being generally disposed within a common vertical plane such that when the first screed plate is rotatably displaced about the first axis, a distance between the first and second ends of the connective member remains substantially constant.